

Meeting Minutes - May 21, 1998

Construction Safety Advisory Committee
US Department of Energy
Las Vegas, Nevada

Committee Chairperson: Pat Finn, Department of Energy - Headquarters (DOE-HQ) EH-51, called the meeting of the DOE Construction Safety Advisory Committee (CSAC) to order.

Mr. Finn welcomed attendees and introductions were made (See Attachment 1, List of Attendees). Mr. Finn expressed, on the part of the CSAC, appreciation to Mr. Russ Baumeister, DOE-Yucca Mountain Project, for arranging the tour of the Yucca Mountain Site and for his assistance in making arrangements for the committee meeting in Las Vegas.

Mr. Finn discussed the following events and issues that have occurred or developed since the last meeting:

- Public Law 104-113 "National Technology Transfer and Advancement Act" and OMB A119 "Federal Participation in the Development and Use of Voluntary Standards" mandates DOE and other federal agencies to interact with national consensus standards committees and other government regulatory agencies in rule making efforts. The DOE Technical Standards Organization is chartered to ensure DOE meets the intent of OMB A119 and to ensure DOE has organizations in place to interact with the various rulemaking organizations such as the Occupational Safety and Health Administration (OSHA) and the American National Standards Institute (ANSI) for their ongoing public rulemaking efforts. The newly approved CSAC charter was issued to committee members and now formally charts the CSAC to participate in the DOE Technical Standards program as the "topical committee" for construction safety issues. The old CSAC charter's primary focus was the development of the DOE Construction Safety Order 5480.9A, now replaced by the construction safety provisions of DOE Order 440.1 "Worker Protection Management for Federal and Contractor Employees." Mr. Finn noted that when construction issues arise other than public rulemaking efforts, the committee still has the flexibility to pursue these actions.
- Due to an internal reorganization, the DOE Occupational Safety and Health Standards Interpretations Response Line, which used to be under the direction of Mr. Finn, is now led by Mr. Ron Eimer, EH-51. Mr. Finn will continue to be the primary author of all new interpretations pertaining to construction safety and hoisting & rigging. Copies of all construction related responses provided by the Response Line since the last CSAC meeting in Chicago (October 1997) were issued to the committee.
- DOE Order 440.1 "Worker Protection Management for Federal and Contractor Employees," which consolidated all the past DOE occupational safety and health worker safety orders into one order, was recently revised. Most of the revisions were editorial in nature. A "crosswalk" of these changes was distributed to the committee. Mr. Finn discussed the following primary changes:
 1. National Fire Protection Association (NFPA) 70, "National Electrical Code" was spelled out to ensure proper application of this code to DOE activities.
 2. NFPA 70E "National Electrical Safety Requirements for Employee Workplaces," was spelled out to ensure proper application of this code to DOE activities.
 3. An accidental death at the Oak Ridge National Laboratory's K-25 Site has brought about some revisions concerning fire watches. One of the corrective actions that resulted from the accident investigation was an internal task assigned to EH-5 to review existing national consensus standards applicable to fire watches that go beyond OSHA's standards. This resulted in invoking ANSI Z49.1 "Safety in Welding and Cutting" and expanding the provisions of NFPA 51.B "Welding, Cutting and Allied Processes," to include worker safety as well as facility safety to the responsibilities of the fire watch.
 4. The Hanford Site initiated a change that now mandates all exemptions, exceptions, and variances to mandatory worker protection requirements contained in DOE Order 440.1A be reviewed and forwarded to DOE-HQ. The annual review of the status of all

exemptions to the requirements contained in the Order would ensure that the circumstances requiring the need for relief have not changed and that instituted controls are still implemented and appropriate.

5. 440.1A now establishes safety policies and procedures to ensure pressure systems are designed, fabricated, tested, inspected, maintained, repaired and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.

Mr. Finn discussed and asked for feedback on the possibilities for the next CSAC meeting of having the Crosby Company, a manufacturer and distributor of wire rope, wire rope clips, shackles, blocks and other hoisting equipment, present a free full day workshop on hoisting and rigging equipment. Mr. Ray Pope, Fluor Daniel Northwest, a member of the DOE Hoisting and Rigging Committee used the Crosby Company to provide a workshops for the Hanford Hoisting and Rigging Committee and highly recommends the workshops. The workshop would be held in conjunction with both the CSAC and the DOE Hoisting and Rigging committee meetings. Schedule could be for example, CSAC meeting on Tuesday, Crosby workshop on Wednesday and the DOE Hoisting and Rigging Committee meeting on Thursday. Mr. Finn ask the committee to express their opinions on having the Crosby Company provide a workshop as opposed to scheduling the next committee meeting in conjunction with the National Safety council (NSC) annual meeting. As noted at last years CSAC meeting in Chicago, which was held in conjunction with the NSC annual meeting, most people could not participate in NSC activities because of the logistics of the meetings or the fact the there is too many other things going on.

Ms. Eva Bryson, DOE Rocky Flats Field Office, noted that the DOE Hoisting and Rigging Committee had discussed the option of only meeting annually for a day and a half or two days because it would provide more time to review motions that are presented for changes to the DOE Hoisting and Rigging Standard. Complicated motions could be reviewed and discussed in the evening before a final vote is taken on the second day. As it is now, motions are presented to the committee and there is not enough time to discuss the issues in a one day meeting and the motion is either postponed until the next committee meeting or it goes to a letter ballot vote. The letter ballot process does not always work well on complicated issues. Mr. Finn noted that the CSAC differs from Hoisting and Rigging Committee in that it has an obligation to maintain a DOE Technical Standard. The DOE Hoisting and Rigging Standard will only be formally revised on an annual basis, thereby supporting the notion of an annual meeting. The committee would handle other issues that arise during the year on an electronic bases.

Mr. Gerald Meyers, EH-53 made a presentation on "Explosive Demolition of Structures." Mr. Meyers started out his presentation by stating the reason for his attendance at the CSAC was to ask for the committee's assistance in working with the Explosive Safety Committee in areas where both committees have jurisdiction; explosive demolitions and construction blasting. Mr. Meyers stated that at this time there are two areas where the DOE Explosive Safety Manual applies to all explosive operations on site. Those areas are locating explosive storage magazines and the transportation of explosives. The DOE Explosive Safety Manual is more restrictive than consensus standards in the requirements for locating explosive storage magazines. The stricter criteria has been established for the protection of people off site from fragmentation if the magazine detonates. Mr. Meyers indicated that the Explosive Safety committee is not going foreword at this time with mandatory requirements to be added to the Explosive Safety Manual. Their main emphasis is on conducting an educational campaign. A major revision to a primary explosives industry publication, "The Blaster's Handbook" (formally the "Dupont Blaster's Handbook" has just been completed. The new handbook has not yet been reviewed by the Explosive Safety committee but is generally regarded as the closest thing to a consensus standard that is widely available. The Explosive Safety committee is planning to review the new handbook and hopes to be able to use it as a consensus standard document for explosive safety operations within DOE. The Explosive Safety committee will be issuing some technical documents that are strictly educational. One such document is a Handbook called "Safe Explosive Demolition of Structures." It is strictly a Handbook and is not a mandatory requirements document. It provides guidelines and answers for questions that could arise during the planning of an explosive demolition projects. It provides the guidelines for a disciplined approach to managing an explosive demolition project when using subcontractors to perform the work. Mr. Meyers stated that the Explosive Safety committee has registered a project to write a non-mandatory DOE Technical Standard for Explosive Safety. This is being done in conjunction with DOE Environmental Management (EM) who has a number of explosive demolition projects scheduled. Additionally, the Explosive Safety Committee is working with EM in the development of "model contract language" for use in the procurement process of explosive demolition projects. Mr. Meyers closed his

presentation by stating that if any site is performing construction blasting or explosive demolition and they are in need of technical assistance feel to contact him. The Explosive Safety committee has expertise in all phases of explosive safety. For technical assistance or if you have any questions on information that was presented by Mr. Meyers you can contact him at (301) 903-3190.

1. Mr. Gary Griess, DP-45 provided a "Behavior Based Safety" update. If you have any questions relating to Mr. Griess's presentation you can contact him at (301) 903-7767.
2. Mr. Craig Schumann, DOE Argonne Group Office made a presentation on "Recent Accidents at Fermi Lab, Argonne, and Ames Laboratories," (Attachment 5). During Mr. Schumann's presentation a number of the committee members indicated they were interested in accessing the accident reports being discussed. The reports dealing with the electrical arc blast accident at Fermi Lab and the rotating shaft accident at the Ames Lab can be found on the DOE Accident Investigation Internet Homepage. If you have any questions relating to Mr. Schumann's presentation, you can contact him at (630) 252-9176.
3. Mr. Finn reported on the April meeting of OSHA's Advisory Committee on Construction Safety and Health (ACCSH). Mr. Finn presented a brief history of ACCSH. As a group, ACCSH was established in 1969 by the Contract Work Hours and Safety Standards Act to assist the Department of Labor in developing policies to debar unsafe contractors from doing construction for federal agencies. In 1971, OSHA came into existence and the ACCSH committee's charter was revised to provide broad input into OSHA's regulatory agenda and compliance policy. At this time, fifty percent of the ACCSH committee membership is re-seated every two years and the current membership of the committee is spread fairly evenly between employee representatives (organized labor), employer representatives (mainly large construction companies), state representatives (mainly from state OSHA programs), public representatives (National Safety Council), and federal representation (which has consistently been represented by National Institute of Occupational Safety and Health (NIOSH). ACCSH has established "working groups" in a variety of areas to develop recommendations that can be submitted to OSHA for future rulemaking. These include:
 - The "Safety Recognition Programs" group, chartered to come up with recommendations to institute programs similar to OSHA's Voluntary Protection Program (VPP) into the construction industry.
 - The "Safety Management, Training, and Confined Space" group. These three topics are grouped together by ACCSH largely because they are grouped this way in OSHA's Construction Standard, 29 CFR 1926 under Subpart C, General Safety and Health Provisions. OSHA is already actively working on the development of its "Construction Safety Program Management" standard, an activity which is fairly high on their regulatory agenda. The past ACCSH committee made specific recommendations to OSHA regarding this effort (See letter to Mr. Gregory Watchman (Attachment 6)). Their draft of this standard is structured a lot like the old DOE Order 5480.9A "Construction Project Safety and Health Management."
 - The "Fall Protection" group, working on issues within 29 CFR 1926 Subpart M "Fall Protection." There is still a lot of issues to be resolved between the Home Building Industry and OSHA on this standard.
 - The "Scaffold" group, working on issues within 29 CFR 1926 Subpart L "Scaffolding." The new standard has requirements regarding fall protection for scaffold erectors and scaffold users. OSHA is considering changes in the standard to resolve these issues. Non-mandatory draft Appendix B to Subpart L, Scaffolding, would serve as a guide for evaluating the feasibility of providing safe access and fall protection for employees erecting or dismantling supported scaffolds.
 - The "Data Collection" group has been chartered to improve data collection within the construction industry. Data provided by the construction industry is usually poor because of the relationship between the prime contractor and any sub-tier contractors working on the project. The lack of good data causes problems for researchers like NIOSH as well as for OSHA itself who cannot effectively target poor performers in the construction industry.

Mr. Finn stated if anyone on the CSAC is interested in becoming a member of one of the working groups, please contact him. Participation in such groups provides an opportunity to be involved in the developing of rulemaking recommendations that are presented to OSHA. Mr. Finn stated that he would probably stay involved in the Construction Safety Management group and that someone from Headquarter's VPP group work may participate in the Safety Recognition Programs group. Also, he would try to have

Janet Macon and Glenn Florczak of EH-5 in the Data Collection and Scaffolding Groups, respectively. Mr. Finn provided the following information from the last ACCSH meeting:

- Mr. Charles Jeffress, OSHA's new Administrator, was the first speaker and provided information as to what he thinks is important for OSHA in construction safety. He stated, this is the first time in history that OSHA has a strategic plan that specifically states that OSHA wants a twenty percent reduction in the injury and illness rates in 100,000 American work sites.
- Mr. Jeffress stated, VPP is clearly more suited to fixed sites than to construction. He felt that a better "excellence recognition program" was needed for the construction industry. An article from BNA Occupational Safety & Health Reporter entitled "Short-Term Work Sites Now Considered Under Program Developed for Construction," discusses a new pilot program for construction sites of greater than a year's duration.
- The Steel Erection Negotiate Rulemaking Committee (SENRAC) finally presented to OSHA a proposed new standard for Steel Erection. OSHA had praise for the negotiated rulemaking process but the Administrative Procedures Act, which requires all proposed standards (including those resulting from negotiated rulemaking) to go through public comment, reportedly now has some SENRAC committee members wondering if they had gained anything using the negotiated rule making process because the steel erection standard is still not scheduled to be published by OSHA any time in the near future.
- OSHA is considering publishing a draft Personal Protective Equipment standard in June and having hearings in September. The new standard will try to establish guidelines regarding payment for the cost of personal protective equipment.
- OSHA's Safety Management Program and Training standard has a remaining issue concerning new employee pre-training requirements. At issue is how previous training an employee has received can be accredited or recognized by a new employer. The employers want the unions to be responsible for creating a system to document their member's prior training when they are dispatched to the employer's work site.

During the last two years at the ACCSH meetings there has been a lot of discussion on rulemaking to address women's issues in construction. The main focus has been the work place culture issues. Some fairly intensive research has been performed on this subject that has discovered further issues that need addressing. These include:

1. Personal security and cleanliness of sanitary facilities.
2. Design and fit of personal protective equipment.
3. Muscular/skeletal disorders caused by having women perform certain types of heavy construction activities.
4. Reproductive hazards from contaminants in the construction workplace.

NIOSH and OSHA have cosponsored the writing of a working paper on Women in the Construction Workplace: "Providing Equitable Safety and Health Protection" (Attachment 10). At this time, OSHA's only rulemaking that may come out of these issues include changes to 29 CFR 1926.51, Sanitation and Decontamination Facilities, which would include gender specific changing rooms as well as sanitary conditions and proximity requirements for toilet and washing facilities. OSHA's original intention of having one standard addressing both general industry and construction confined space entry has been changed in favor of having a construction specific confined space standard. The rationale provided for this decision was the changing nature of confined spaces in construction as well the distinctions between the construction of sewers (where 29 CFR 1926 applies) and their maintenance (where 29 CFR 1910 applies and methane is more of an issue). These are the two issues that has led OSHA to agree with ACCSH's view that there should be separate standards for construction and general industry.

1. Mr. Ed Blackwood, DOE EH-3, and Mr. Mitch Kunich, DOE Nevada Operations Office, made a presentation entitled "Integrated Safety Management Update". The presentation focused on the principles of Integrated Safety Management as well as issues pertaining to upcoming ISM verification visits.
2. Mr. Dave Vail, Safety Manager Perini Construction Company, gave a presentation on "Safety Management on Las Vegas Projects."
3. Mr. Charles Reaux, Yucca Mountain Project gave a presentation on "Implementation of OSHA's new Respirator Standard at the Yucca Mountain Project".
4. Mr. Finn discussed review comments submitted to him by the CSAC on the recent ANSI draft standards, A10.20 "Ceramic Tile,

Terrazzo, and Dimension Stones" and A10.21 "Proper Cleanup and Disposal of Contaminated Work Clothing". In reference to the A10.20 draft standard, Mr. Finn indicated that he adopted about all comments submitted by the committee and added some comments of his own and returned the ballot as "approved with comment." In reference to the A10.21 draft standard, Mr. Finn indicated that there were some very good technical comments submitted but he didn't feel this proposed standard fits within the charter of the ANSI A10 committee or that is otherwise necessary in that pertinent occupational safety and health and environmental issues are already dealt with in applicable OSHA General Industry (29 CFR 1910) and Environmental Protection Agency (Title 40) regulations. Mr. Finn submitted a "negative ballot" on A10.21 draft standard.

5. Mr. Finn closed out and adjourned the meeting.

